AMENDMENTS TO THE CLAIMS

1. (Previously presented) An interferometric device for measuring an out-of-plane deformation of an object surface, comprising:

means for producing successive interferograms at a predetermined nominal rate of phase change from a light beam reflected from the object surface;

means for implementing an algorithm for interferometric analysis of said interferograms; and

means for changing said predetermined nominal rate such that each phase change between successive data-acquisition frames falls within an operational window of the algorithm;

wherein said means for implementing an algorithm for interferometric analysis includes a means for calculating said out-of-plane deformation.

2. (Original) The device of Claim 1, wherein said means for producing successive interferograms includes a scanner operating at said predetermined nominal rate of phase change.

3. (Original) The device of Claim 1, wherein said means for producing successive interferograms includes a light detector triggered at said predetermined nominal rate of phase change.

4. (Original) The device of Claim 1, wherein said means for

acquiring successive interferograms includes a light source capable of varying a wavelength to produce said predetermined nominal rate of phase change.

5. (Original) The device of Claim 1, wherein said means for acquiring successive interferograms includes a means for changing an index of refraction along an optical path of the interferometric device to produce said predetermined nominal rate of phase change.

6. (Original) The device of Claim 1, wherein said means for acquiring successive interferograms includes a means for changing a polarization state of an interfering light beam to produce said predetermined nominal rate of phase change.

7. (Original) The device of Claim 1, wherein said means for acquiring successive interferograms includes a tilting plate used to produce said predetermined nominal rate of phase change.

8. (Original) The device of Claim 1, wherein said means for acquiring successive interferograms includes a tilting grating used to produce said predetermined nominal rate of phase change.

9. (Original) The device of Claim 2, wherein said means for changing said predetermined nominal rate comprises a driving signal operating on the scanner.

10. (Original) The device of Claim 1, wherein said means for changing said predetermined nominal rate comprises a driving signal operating on a sample stage.

11. (Original) The device of Claim 1, wherein said means for changing said predetermined nominal rate comprises a driving signal operating on a reference mirror of the interferometric device.

12. (Original) The device of Claim 1, wherein said means for changing said predetermined nominal rate comprises a driving signal operating on an objective of the interferometric device.

13. (Original) The device of Claim 1, further comprising a reference signal circuit applied to said means for acquiring successive interferograms.

14. (Previously presented) The device of Claim 1, wherein said means for changing the predetermined nominal rate is applied equally at each pixel of the object surface.

15. (Previously presented) The device of Claim 1, wherein said means for changing the predetermined nominal rate is applied at each pixel of the object surface as a function of said out-of-plane deformation at said pixel.

16. (Original) The device of Claim 1, wherein said means for changing the predetermined nominal rate includes a substantially linear component combined with the nominal rate.

17. (Original) The device of Claim 1, wherein said means for changing the predetermined nominal rate includes a substantially periodic component combined with the nominal rate.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Previously presented) A method for measuring an out-of-plane deformation of an object surface using an interferometric device, comprising the following steps:

acquiring successive interferograms produced at a predetermined nominal rate of phase change from a light beam reflected from said object surface;

implementing an algorithm for interferometric analysis of said interferograms; and

changing said predetermined nominal rate such that each phase change between successive data-acquisition frames falls within an operational window of the algorithm;

wherein said step of changing said predetermined nominal rate such that each phase change between successive data-acquisition frames falls within an operational window of the algorithm is carried out with a feedback signal based on a prior knowledge of said out-of-plane deformation of the object surface.